

C149.02/0

Claims

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b1 1. A carrier device for use in an antibiotic susceptibility test ("AST"), the device releasably carrying an antibiotic related to the test, and bearing machine readable information concerning the antibiotic, wherein the device also includes orientation means for enabling an image analyser to determine an optimal reading direction of the readable information.

2. A device according to claim 1, in which the orientation means comprises means other than said machine readable information.

3. A device according to claim 2, in which the orientation means is separate from said machine readable information.

A 4. A device according to <sup>claim 1</sup> ~~any of claims 1 to 3~~, in which the machine readable information comprises a code of one or more characters, whereby an image analyser comprising code reading means, can determine the orientation of the code, using the orientation means, and can adjust the orientation of the code, or an image thereof, to bring the perceived orientation into alignment with that necessary for proper reading of the code.

A 5. A device according to <sup>claim 1</sup> ~~any of the preceding claims~~, in which the device comprises an AST disk.

A 6. A device according to <sup>claim 1</sup> ~~any of the preceding claims~~, in which the orientation means comprises an arrangement of information presented on the device surface, in addition to the readable information.

A 7. A device according to <sup>claim 1</sup> ~~any of the preceding claims~~ in which said orientation means comprises linearly-arranged information.

A 9. A device according to claim 7 ~~or claim 3~~, wherein said linearly-arranged information is a printed line or lines, printed below or above the readable information.

A 11. A device according to <sup>claim 1</sup> ~~any of the preceding claims~~, in which said machine readable information or character code identifies said substance and/or its concentration.

identify orientation means on the located carrier device, and rotate the perceived image of the located device as required so that the perceived image of a multi-character code printed on the device is brought into alignment with a proper reading direction for the code, and

the code.

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13. An image analysis system according to claim 12, which additionally determines a visible characteristic of the zone of inhibition, if any, surrounding the disk.

14. An analysis system according to claim 13, wherein the electronic information processing means includes or is linked to an 'expert system' comprising a database of AST characteristics of known micro-organisms.

A 15. An analysis system according to claim 13 ~~or claim 14~~, including display means for displaying the disk image.

A 16. An analysis system according to <sup>claim 13</sup> ~~any one of claims 13 to~~  
A ~~15~~, wherein the diameter of the zone of inhibition is  
determined.

A 17. An analysis system according to <sup>claim 13</sup> ~~any one of claims 13 to~~  
A ~~16~~, wherein the system is programmed or trained to identify  
orientation means which comprises an underline printed beneath  
the multi-character code.

18. An image analyser for use in determining the result of susceptibility testing of micro-organisms on a culture medium, comprising:

a) camera means for viewing the culture medium;

b) electronic information processing means, linked to said camera means, programmed or trained to interpret any region of visibly altered micro-organism growth in the vicinity of a susceptibility testing device, such as a disk, present on the culture medium, wherein said processing means is also programmed or trained to read a character code on the device indicative of the susceptibility reagent in the device and to interpret orientation means incorporated in or on the device

by which the optimal reading direction of the character code can be recognised, and to adjust as necessary the actual reading direction to bring this into line with the actual orientation of the character code on the device.

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